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November 20, 1997

HAND DELIVERY

Mr. David Waddell
Executive Secretary
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, TN 37243-0505

Re: Universal Service Generic Contested Case
Docket No. 97-00888

Dear Mr. Waddell:

Enclosed for filing in the above-referenced case are the original and thirteen copies of the Tennessee Cable Telecommunications Association's Petition to File their Response to the Staff's Request for Information on Phase II, Issue No. 16 out of time, and the late filing of the TCTA's Responses

Copies are being served on counsel for the interested parties.

Very truly yours,

FARRIS, MATHEWS, GILMAN, BRANAN & HELLEN, P.L.C.

By: Charles B. Welch, Jr.
Charles B. Welch, Jr.

CBWjr:cg

encs:

cc: Parties of Record

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**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

In Re:

**UNIVERSAL SERVICE GENERIC
CONTESTED CASE**

**Docket No.
97-00888**

**TENNESSEE CABLE TELECOMMUNICATIONS ASSOCIATION'S
PETITION FOR LEAVE TO FILE RESPONSE TO THE TRA STAFF'S
REQUEST FOR INFORMATION PHASE II, ISSUE NO. 16 OUT OF TIME**

Comes now the Tennessee Cable Telecommunications Association ("TCTA"), and submits this their Petition for Leave to file their response to the TRA Staff's request for information on Phase II, Issue No. 16 out of time, and in support of its petition states as follows:

1. The responses to the Staff's Request for Information on Phase II, Issue No. 16 were due on Friday, November 14, 1997.
2. That counsel for the TCTA was out of town at a hearing on the date this filing was due; had inadvertently left this filing date off of the filing calendar; and has also been preparing for the hearings before the Tennessee Regulatory Authority in Docket No. 97-01262 which began on Monday, November 17, 1997, as well as preparing for many proceedings in other states.
3. The late filing of the TCTA's response to the Staff's request for information does not adversely effect or prejudice any other party in this matter.

WHEREFORE, PREMISES CONSIDERED, the Tennessee Cable Telecommunications Association prays that its petition for leave to file their response to Phase II, Issue No. 16 of the

Staff's request for information out of time be granted.

Respectfully submitted,

**FARRIS, MATHEWS, GILMAN,
BRANAN & HELLEN, P.L.C.**

By: Charles B. Welch, Jr.

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CERTIFICATE OF SERVICE

I, Charles B. Welch, Jr., hereby certify that I have served a copy of the foregoing the Tennessee Cable Telecommunications Association's Petition for Leave to File Response to the TRA Staff's Request for Information on Phase II, Issue No. 16 Out of Time to the interested parties on the attached list by depositing copy of same in the U. S. Mail, postage prepaid, this the 20th day of November, 1997.

Charles B. Welch, Jr.
CHARLES B. WELCH, JR.

**BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE**

In Re:

**UNIVERSAL SERVICE GENERIC
CONTESTED CASE**

**Docket No.
97-00888**

**TENNESSEE CABLE TELECOMMUNICATIONS
ASSOCIATION'S RESPONSE TO THE TRA STAFF'S
REQUEST FOR INFORMATION PHASE II, ISSUE NO. 16**

The Tennessee Cable Telecommunications Association ("TCTA") submits the following comments at the request of the Tennessee Regulatory Authority ("TRA") staff on Phase II, Issue No. 16.

REQUEST:

Phase II - Issue No. 16:

What cost model or method should be adopted to calculate needed universal service supports? (Likely to be contested) 5(a)(vii), 14(b)(i), and 14(b)(ii). Note: the word "method" is used to mean "algorithm(s) and input value(s)."

a. What method should be used to populate distributions within service areas?

Both the Hatfield Model Version 5.0 and the Benchmark Cost Proxy Model Version 2.5 should be evaluated in considering the degree of universal support provided to high cost areas. The models should be cross validated in order to assess the sensitivity of the most significant user inputs. As the deficiencies and strengths of the respective models are identified, modifications to user inputs can be made to improve the reasonableness of the cost estimates.

b. What method should be used to match a model's wire center line count to a LEC's existing wire center line count?

The Hatfield Model Version 5.0 and the BCPM Version 2.5 rely upon data available from Business Location Research that provides wire center boundaries down to approximately the Census Block level. The sponsors claim that the more recent versions of both models

incorporate improvements in locating customers, assigning them to the appropriate wire center, and designing a network to serve them. Since both cost proxy models use similar data sources, any variance in methodology (i.e. applying the data bases to the models) should be fully investigated and adequately supported.

- c. **What method should be used to determine the proper outside plant mix (i.e. the fraction of aerial, underground, and buried cable) and associated materials and installation costs?**

Forward looking economic cost principles should guide the determination of what outside plant facilities should support the provision of universal service. Assumptions regarding economies of scale (e.g. material prices, installation costs, etc.), density, and terrain affect the cost estimates of providing universal service. Tennessee state-specific information should be incorporated into the model where such information reflects the forward looking operations of an efficient carrier operating in a competitive market.

- d. **What method should be used to determine drop lengths and associated costs?**

It is reasonable to expect that drop lengths should vary based upon the density of the study area. State-specific data regarding drop lengths should be used to project drop lengths on a forward looking basis. The costs associated with drop lengths should reflect the economies of scale that a large, efficient carrier would use in a competitive market.

- e. **What method should be used to determine structure sharing (e.g., poles, trenches, conduits)?**

The percentage of sharing of support structures is likely to increase in the future due to right-of-way limitations and the higher demand for (i.e. more carriers using) such facilities. Historical structure sharing percentages may not capture the level of sharing that is anticipated on a forward looking basis. Thus, the Tennessee state-specific, historical data should be adjusted to reflect the forward looking conditions of a competitive environment where more carriers will seek to share support structures.

- f. **What method should be used to determine the most economically efficient fiber-copper cross-over point?**

In the Hatfield Model, results indicate that the estimated monthly per loop costs decrease as the fiber-copper cross-over point is extended. Technical considerations limit the maximum length of a copper loop (both feeder and distribution facilities) to eighteen thousand feet in the Hatfield Model while the BCPM sets the maximum loop length for copper at twelve thousand feet. The fiber-copper cross-over point should estimate the cost of the facilities that are necessary for the provision of universal service. The deployment of facilities to support strategic marketing considerations should not be attributed to the provision of universal service.

g. What loop design standards, if any, should be adopted for the cost model?

The cost model should design only those facilities and related expenses that support the narrowband network elements necessary for the delivery of traditional voice communications services and narrowband data services at an acceptable quality level.

h. What size(s) of digital loop carriers should the model incorporate?

The type of digital loop carrier engineered into the network should be based upon the density of the study area being examined. The deployment of digital loop carrier in the Hatfield Model and the BCPM is line sensitive.

i. What wireless threshold, if any, should the model use?

Although the BCPM adopts a \$10,000 maximum loop investment, the Authority may wish to consider the number of Tennessee loops with forward looking cost estimates that exceed this amount before committing to a wireless threshold.

j. What method should be used to determine the materials and installation costs of manholes, poles, anchors, guys, aerial cable, and building attachments?

Material prices and installation costs for these facilities should reflect the economies of scale that a large, efficient carrier would benefit from in a competitive market. The material prices and installation costs should not be based solely upon the Tennessee state-specific experience of the incumbent provider but should be adjusted to reflect the additional efficiencies likely to be realized on a forward looking basis.

k. What method should be used to determine NID costs?

The projected NID costs should be developed for the type of NID that will be used in the network (e.g. NIDs for residential or business lines). The material prices and installation costs should be based upon the economies of scale that the incumbent provider is likely to realize in a forward looking environment.

l. What method should be used to determine the cost of investment and installation of service area interfaces?

The costs of investment and installation of service area interfaces should be based upon the type of SAI that will be used in the forward looking network. The underlying costs of the SAI must reflect that security and protection concerns vary among study areas (e.g. SAIs placed in large buildings should exhibit lower costs) and the type of facilities that it will interface (e.g. an interface with fiber feeder facilities requires an adjacent DLC remote terminal). The material prices and installation costs should be representative of the economies of scale of a large carrier on a forward looking basis.

m. What method should be used to determine cable fill and utilization factors?

Cable distribution and feeder fill factors should reflect the need for a reasonable amount of administrative spare capacity and spare capacity related to the modularity of facilities. In addition, the fill factors should include a percentage for demand related spare capacity that realistically matches growth over the projected economic life of the facilities.

n. What method should be used to determine the mix of host, stand-alone, and remote switches?

In order to target universal service support to high cost areas, the cost proxy model should strive to determine the switching configuration that is most appropriate for the provision of universal service in the study area (e.g. high density areas with large concentrations of businesses).

o. What switch capacity constraints, if any, should the model employ?

Accepted industry engineering practices to determine switching capacity constraints should be used in the cost proxy model. The considerations should include the maximum number of busy hour call attempts, traffic limits, line and trunk port limits, processor capacity, and administrative fill requirements.

p. What method should be used to determine switching investment costs?

Although vendor price inputs into the BCPM are deemed to be proprietary, arrangements should be made for additional disclosure. Historical Tennessee state-specific information should be used but adjusted to be representative of forward looking conditions.

q. What method should be used to determine the portion of total interoffice trunking, signaling, and local tandem costs to be attributed to universal service?

The design of a network to provide universal service under a forward looking costing methodology is likely to differ from the embedded network of the incumbent provider. The use of historical factors to determine the portion of total interoffice trunking, signaling, and local tandem costs may no longer be representative of forward looking conditions. The traffic characteristics of Tennessee should be considered to assess the reasonableness of the cost proxy model's allocation of these costs to the provision of universal service.

r. What method should be used to determine costs of general support facilities (e.g. vehicles, land, buildings)?

The level of general support assets necessary for the provision of universal service can be determined based upon the ratio of these investments to total investment. The

resulting factor can then be applied to the investment necessary to provide universal service.

s. What method should be used to determine the economic depreciation rate of assets?

The most recent projection lives and future net salvage percents prescribed by the Federal Communications Commission for BellSouth-Tennessee should be used in the cost proxy model.

t. What method should be used to determine plant specific (e.g., equipment and maintenance), non-plant specific (e.g., engineering, network operations), customer service (e.g., marketing and billing), and corporate (e.g., legal and accounting) expense factors?

The use of factors (e.g. historic expenses to historic investment levels) to estimate expenses may not capture the efficiencies expected to be introduced into a carrier's operations on a forward looking basis. Any adjustments made to historic expense levels for the purpose of restating costs on a forward looking basis should be fully supported and include documentation on the nature and magnitude of the adjustment as well as the subsidiary expense account(s) affected.

u. In which cases is it appropriate to allocate costs between the provision of universal service and all other services?

In addition to investment related costs and direct operating expenses (i.e. plant specific and plant non-specific expenses), overhead amounts and other expenses incurred in the provision of universal service, such as customer services operations, may be appropriately included in the cost proxy model.

v. In cases where it is appropriate, what method should be used to allocate costs between the provision of universal service and all other services?

Cost causation principles should be followed to the greatest extent possible.

w. What, if any, local usage component should be included in universal service support?

The amount of local usage included in universal service support should consider Tennessee traffic characteristics.

x. What is the proper cost and percentage of equity?

The capital structure and cost of capital, including the cost of equity and the cost of debt, for use in the universal service cost proxy model should recognize the incumbent provider's economies of scale and scope and the fact that there is no meaningful

competition for basic local exchange service from facilities-based providers at this time.

y. **What is the proper cost of debt?**

See response to item x.

Respectfully submitted,

**FARRIS, MATHEWS, GILMAN,
BRANAN & HELLEN, P.L.C.**

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